Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

Listing of Claims

1. (Cancelled)

2. (Previously Presented) The wound dressing of claim 77 wherein the microparticles have an average particle size of 1 micron or less when in a substantially nonhydrated form.

3. (Previously Presented) The wound dressing of claim 2 wherein the microparticles have an average particle size of 0.5 micron or more when in a substantially nonhydrated form.

4. (Previously Presented) The wound dressing of claim 77 wherein the components for the polymer composition further comprise secondary absorbent particles having an average particle size of greater than 10 microns when in a substantially nonhydrated form.

5. (Previously Presented) The wound dressing of claim 4 wherein the secondary absorbent particles having an average particle size of greater than 10 microns are superabsorbent.

6. (Previously Presented) The wound dressing of claim77 wherein the microparticles are superabsorbent.

7. (Previously Presented) The wound dressing of claim 77 wherein the organic polymer matrix comprises an elastomeric polymer.

8. (Previously Presented) The wound dressing of claim 7 wherein the elastomeric polymer is selected from the group consisting of a polyisoprene, a styrene-diene block copolymer, a natural rubber, a polyurethane, a polyether-block-amide, a poly-alpha-olefin, a (C1-C20)acrylic ester of meth(acrylic) acid, an ethylene-octene copolymer, and combinations thereof.

9. (Withdrawn) The wound dressing of claim 77 wherein the organic polymer matrix comprises a thermoplastic polymer.

10. (Withdrawn) The wound dressing of claim 9 wherein the thermoplastic polymer is a polyolefin.

11. (Previously Presented) The wound dressing of claim 77 wherein the organic polymer matrix comprises a hydrophilic polymer.

12. (Previously Presented) The wound dressing of claim 11 wherein the hydrophilic polymer is selected from the group consisting of a polysaccharide, a polyether, a polyurethane, a polyacrylate, a polyester, and combinations thereof.

13. (Previously Presented) The wound dressing of claim 77 wherein the poly(quaternary amine)-containing organic polymer microparticles comprises a quaternary ammonium salt of an organic polymer.

14. (Previously Presented) The wound dressing of claim 13 wherein the microparticles comprise a cationic homopolymer of the methyl chloride quaternary salt of 2-(dimethylamino)ethyl methacrylate.

15. (Previously Presented) The wound dressing of claim 77 wherein the components for the polymer composition further comprise an additive selected from the group consisting of a

plasticizer, a tackifier, a crosslinking agent, a stabilizer, an extruding aid, a filler, a pigment, a dye, a swelling agent, a foaming agent, a chain transfer agent, and combinations thereof.

16. (Previously Presented) The wound dressing of claim 15 wherein the additive is a filler comprising fibers.

17. (Previously Presented) The wound dressing of claim 77 wherein the organic polymer matrix comprises a mixture of two or more polymers.

18. (Previously Presented) The wound dressing of claim 82 wherein the microparticles are present in an amount of 1 wt-% to 60 wt-%, based on the total weight of the polymer composition.

19. (Previously Presented) The wound dressing of claim 77 wherein the composition includes water in an amount of 5 wt-% to 10 wt-%, based on the total weight of the polymer composition.

20. (Withdrawn) The wound dressing of claim 77 wherein the polymer composition is in the form of an extruded film.

21. (Previously Presented) The wound dressing of claim 77 wherein the polymer composition is in the form of a foam.

22. (Previously Presented) The wound dressing of claim 77 wherein the components for the polymer composition further comprise a foaming agent.

23. (Previously Presented) The wound dressing of claim 22 wherein the foaming agent is a physical foaming agent.

24. (Previously Presented) The wound dressing of claim 23 wherein the physical foaming agent comprises thermally expandable microspheres.

25. (Previously Presented) The wound dressing of claim 24 wherein the polymer composition is stable.

26. (Previously Presented) The wound dressing of claim 77 wherein the method further comprises combining the components in the presence of water and removing a substantial portion of the water.

27-59. (Cancelled)

60. (Previously Presented) A method comprising applying the wound dressing of claim 77 to a wound.

61-74. (Cancelled)

75. (Previously Presented) The wound dressing of claim 77 wherein the bioactive agent is present in an amount of no more than 3 weight percent based on the total weight of the poly(quaternary amine)-containing polymer.

76. (Previously Presented) The wound dressing of claim 82 wherein the bioactive agent is present in an amount of no more than 3 weight percent based on the total weight of the poly(quaternary amine)-containing polymer.

77. (Currently Amended) A wound dressing comprising an apertured, liquid permeable substrate and a polymer composition disposed thereon, wherein the polymer composition comprises a polymer mixture comprising an organic polymer matrix and microparticles, wherein at least a portion of the bioactive agent is incorporated within the microparticles, wherein the microparticles are present in an amount of 1 wt-% to 60 wt-%, based on the total weight of the polymer composition, wherein the microparticles when in a substantially nonhydrated form have an average particle size of 10 microns or less, and wherein the polymer composition is preparable by a method comprising combining components comprising:

an organic polymer matrix;

a continuous hydrophobic liquid phase and absorbent hydrophilic polymer microparticles dispersed within the hydrophobic liquid phase, wherein the microparticles when in a substantially nonhydrated form have an average particle size of 10 microns or less, and wherein the microparticles comprise a poly(quaternary amine)-containing organic polymer;

a bioactive agent selected from the group consisting of a silver compound, a copper compound, a zinc compound, and combinations thereof, wherein the silver compound has a solubility in water of at least 0.1 gram per liter; and

an optional foaming agent;

wherein the components are combined in a manner to produce a polymer mixture comprising the organic polymer matrix and the microparticles, wherein at least a portion of the bioactive agent is incorporated within the microparticles; and

wherein the microparticles are present in an amount of 1 wt-% to 60 wt-%, based on the total weight of the polymer composition.

78. (Previously Presented) The wound dressing of claim 77 wherein the polymer composition when coated on a substrate displays a 180° peel strength from stainless steel of less than 1 N/cm.

79. (Withdrawn - Currently Amended) A wound dressing comprising an apertured, liquid permeable substrate and a polymer composition disposed thereon, wherein the polymer composition comprises a polymer mixture comprising an organic polymer matrix and microparticles, wherein at least a portion of the bioactive agent is incorporated within the microparticles, wherein the microparticles are present in an amount of 1 wt-% to 60 wt-%, based on the total weight of the polymer composition, wherein the microparticles when in a substantially nonhydrated form have an average particle size of 10 microns or less, and wherein the polymer composition is preparable by a method comprising combining components comprising:

an organic polymer matrix;

a continuous hydrophobic liquid phase and absorbent hydrophilic polymer microparticles dispersed within the hydrophobic liquid phase, wherein the microparticles when in a substantially nonhydrated form have an average particle size of 10 microns or less, and wherein the microparticles comprise a polylactam-containing organic polymer;

a bioactive agent selected from the group consisting of a silver compound, a copper compound, a zinc compound, and combinations thereof, wherein the silver compound has a solubility in water of at least 0.1 gram per liter; and

an optional foaming agent;

wherein the components are combined in a manner to produce a polymer mixture comprising the organic polymer matrix and the microparticles, wherein at least a portion of the bioactive agent is incorporated within the microparticles;

wherein the microparticles are present in an amount of 1 wt-% to 60 wt-%, based on the total weight of the polymer composition; and

wherein the polymer composition when coated on a substrate displays a 180° peel strength from stainless steel of less than 1 N/cm.

80. (Withdrawn) The wound dressing of 79 wherein the method further comprises combining the components in the presence of water and removing a substantial portion of the water.

81. (Withdrawn) A method comprising applying the wound dressing of claim 79 to a wound.

82. (Currently Amended) A wound dressing comprising an apertured, liquid permeable substrate and a polymer composition disposed thereon, wherein the polymer composition comprises a polymer mixture comprising an organic polymer matrix and microparticles, wherein the microparticles when in a substantially nonhydrated form have an average particle size of 10 microns or less, and wherein the polymer composition is preparable by a method comprising: combining components comprising:

an organic polymer matrix;

a continuous hydrophobic liquid phase and absorbent hydrophilic polymer microparticles dispersed within the hydrophobic liquid phase, wherein the microparticles when in a substantially nonhydrated form have an average particle size of 10 microns or less, and wherein the microparticles comprise a poly(quaternary amine)-containing organic polymer;

a bioactive agent selected from the group consisting of a silver compound, a copper compound, a zinc compound, and combinations thereof, wherein the silver compound has a solubility in water of at least 0.1 gram per liter; and

an optional foaming agent;

wherein the components are combined in water in a manner to produce a polymer mixture comprising the organic polymer matrix and the microparticles, wherein at least a portion of the bioactive agent is incorporated within the microparticles; and

removing a substantial portion of the water to form the polymer composition.

83. (Previously Presented) The wound dressing of claim 82 wherein the polymer composition when coated on a substrate displays a 180° peel strength from stainless steel of less than 1 N/cm.

84. (Previously Presented) A method comprising applying the wound dressing of claim 82 to a wound.

85. (Withdrawn - Currently Amended) A wound dressing comprising an apertured, liquid permeable substrate and a polymer composition disposed thereon, wherein the polymer composition comprises a polymer mixture comprising an organic polymer matrix and microparticles, wherein the microparticles when in a substantially nonhydrated form have an average particle size of 10 microns or less, and wherein the polymer composition is preparable by a method comprising:

combining components comprising:

an organic polymer matrix;

a continuous hydrophobic liquid phase and absorbent hydrophilic polymer microparticles dispersed within the hydrophobic liquid phase, wherein the microparticles when in a substantially nonhydrated form have an average particle size of 10 microns or less, and wherein the microparticles comprise a polylactam-containing organic polymer;

a bioactive agent selected from the group consisting of a silver compound, a copper compound, a zinc compound, and combinations thereof, wherein the silver compound has a solubility in water of at least 0.1 gram per liter; and

an optional foaming agent;

wherein the components are combined in water in a manner to produce a polymer mixture comprising the organic polymer matrix and the microparticles, wherein at least a portion of the bioactive agent is incorporated within the microparticles; and

removing a substantial portion of the water to form a polymer composition, wherein the polymer composition when coated on a substrate displays a 180° peel strength from stainless steel of less than 1 N/cm.

86. (Withdrawn) The would dressing of claim 85 wherein the microparticles are present in an amount of 1 wt-% to 60 wt-%, based on the total weight of the polymer composition.

87. (Withdrawn) A method comprising applying the wound dressing of claim 85 to a wound.

88. (Previously Presented) The wound dressing of claim 82 wherein the microparticles have an average particle size of 1 micron or less when in a substantially nonhydrated form.

89. (Previously Presented) The wound dressing of claim 88 wherein the microparticles have an average particle size of 0.5 micron or more when in a substantially nonhydrated form.

90. (Previously Presented) The wound dressing of claim 82 wherein the components for the polymer composition further comprise secondary absorbent particles having an average particle size of greater than 10 microns when in a substantially nonhydrated form.

91. (Previously Presented) The wound dressing of claim 90 wherein the secondary absorbent particles having an average particle size of greater than 10 microns are superabsorbent.

92. (Previously Presented) The wound dressing of claim 82 wherein the microparticles are superabsorbent.

93. (Previously Presented) The wound dressing of claim 82 wherein the organic polymer matrix comprises an elastomeric polymer.

94. (Previously Presented) The wound dressing of claim 93 wherein the elastomeric polymer is selected from the group consisting of a polyisoprene, a styrene-diene block copolymer, a natural rubber, a polyurethane, a polyether-block-amide, a poly-alpha-olefin, a (C1-C20)acrylic ester of meth(acrylic) acid, an ethylene-octene copolymer, and combinations thereof.

95. (Withdrawn) The wound dressing of claim 82 wherein the organic polymer matrix comprises a thermoplastic polymer.

96. (Withdrawn) The wound dressing of claim 95 wherein the thermoplastic polymer is a polyolefin.

97. (Previously Presented) The wound dressing of claim 82 wherein the organic polymer matrix comprises a hydrophilic polymer.

98. (Previously Presented) The wound dressing of claim 97 wherein the hydrophilic polymer is selected from the group consisting of a polysaccharide, a polyether, a polyurethane, a polyacrylate, a polyester, and combinations thereof.

99. (Previously Presented) The wound dressing of claim 82 wherein the poly(quaternary amine)-containing organic polymer microparticles comprises a quaternary ammonium salt of an organic polymer.

100. (Previously Presented) The wound dressing of claim 82 wherein the components for the polymer composition further comprise an additive selected from the group consisting of a plasticizer, a tackifier, a crosslinking agent, a stabilizer, an extruding aid, a filler, a pigment, a dye, a swelling agent, a foaming agent, a chain transfer agent, and combinations thereof.

101. (Previously Presented) The wound dressing of claim 82 wherein the organic polymer matrix comprises a mixture of two or more polymers.

102. (Withdrawn) The wound dressing of claim 82 wherein the polymer composition is in the form of an extruded film.

103. (Previously Presented) The wound dressing of claim 82 wherein the polymer composition is in the form of a foam.

104. (Previously Presented) The wound dressing of claim 82 wherein the components for the polymer composition further comprise a foaming agent.

105. (Previously Presented) The wound dressing of claim 104 wherein the foaming agent is a physical foaming agent.

106. (Previously Presented) The wound dressing of claim 105 wherein the physical foaming agent comprises thermally expandable microspheres.

107. (Previously Presented) The wound dressing of claim 82 wherein the method further comprises combining the components in the presence of water and removing a substantial portion of the water.

108. (Withdrawn) The wound dressing of claim 79 wherein the microparticles have an average particle size of 1 micron or less when in a substantially nonhydrated form.

109. (Withdrawn) The wound dressing of claim 79 wherein the components for the polymer composition further comprise secondary absorbent particles having an average particle size of greater than 10 microns when in a substantially nonhydrated form.

110. (Withdrawn) The wound dressing of claim 79 wherein the microparticles are superabsorbent.

111. (Withdrawn) The wound dressing of claim 79 wherein the organic polymer matrix comprises an elastomeric polymer.

112. (Withdrawn) The wound dressing of claim 79 wherein the organic polymer matrix comprises a thermoplastic polymer.

113. (Withdrawn) The wound dressing of claim 79 wherein the components for the polymer composition further comprise an additive selected from the group consisting of a plasticizer, a tackifier, a crosslinking agent, a stabilizer, an extruding aid, a filler, a pigment, a dye, a swelling agent, a foaming agent, a chain transfer agent, and combinations thereof.

114. (Withdrawn) The wound dressing of claim 79 wherein the polymer composition is in the form of an extruded film.

115. (Withdrawn) The wound dressing of claim 79 wherein the bioactive agent is present in an amount of no more than 3 weight percent based on the total weight of the poly(quaternary amine)-containing polymer.

116. (Withdrawn) The wound dressing of claim 85 wherein the microparticles have an average particle size of 1 micron or less when in a substantially nonhydrated form.

117. (Withdrawn) The wound dressing of claim 85 wherein the components for the polymer composition further comprise secondary absorbent particles having an average particle size of greater than 10 microns when in a substantially nonhydrated form.

118. (Withdrawn) The wound dressing of claim 85 wherein the microparticles are superabsorbent.

119. (Withdrawn) The wound dressing of claim 85 wherein the organic polymer matrix comprises an elastomeric polymer.

120. (Withdrawn) The wound dressing of claim 85 wherein the organic polymer matrix comprises a thermoplastic polymer.

121. (Withdrawn) The wound dressing of claim 85 wherein the components for the polymer composition further comprise an additive selected from the group consisting of a plasticizer, a tackifier, a crosslinking agent, a stabilizer, an extruding aid, a filler, a pigment, a dye, a swelling agent, a foaming agent, a chain transfer agent, and combinations thereof.